TRENDNET®

Wireless PTZ Cloud Camera
Wireless Day / Night PTZ Cloud Camera

TV-IP851WC / TV-IP851WIC

Contents

Product Overview

TV-IP851WC   **TV-IP851WIC**

Package Contents

In addition to your camera, the package includes:

- Multi-Language Quick Installation Guide
- CD-ROM (Utility & User's Guide)
- Network cable (1.5m / 5ft)
- Power adapter (12V DC, 1.25A)

If any package contents are missing or damaged, please contact the retail store, online retailer, or reseller/distributor that the item was purchased.

Features

TV-IP851WC

The Wireless PTZ Internet Camera, model TV-IP851W, provides wide visibility with its varied Pan and Tilt feature. Pan the camera side-to-side, a remarkable 340 degrees, and tilt up-and-down 115 degrees to broaden your viewing capabilities.

Wireless n technology provides unsurpassed wireless coverage and improved streaming video quality. Add this camera to your wireless network at the touch of a button with Wi-Fi Protected Setup (WPS).

Record 640 x 480 pixel (VGA) video at up to 20 frames per second (fps). Manage up to 32 TRENDnet cameras with the included complimentary camera management software. Advanced features include adjustable motion detection recording areas, email alerts, scheduled recording sessions, pan/tilt Auto-Patrol, date-and-time overlays, one-way audio, an adjustable lens, and four times digital zoom. A wall/ceiling mounting kit is included and the camera's off white housing blends into most environments.

TV-IP851WIC

The Wireless Day/Night PTZ Internet Camera, model TV-IP851WI, provides day and night visibility with its infra-red optics above the lens. Pan the camera side-to-side, a remarkable 340 degrees and tilt up-and-down, 115 degrees, from any Internet connection.

Record indoor video in complete darkness for distances of up to 7.5 meters. Wireless n technology provides unsurpassed wireless coverage and improved streaming video quality. Add this camera to your wireless network at the touch of a button with Wi-Fi Protected Setup (WPS).

Record 640 x 480 pixel (VGA) video at up to 20 frames per second (fps). Manage up to 32 TRENDnet cameras with the included complimentary camera management software. Advanced features include adjustable motion detection recording areas, email alerts, scheduled recording sessions, pan/tilt Auto-Patrol, date-and-time overlays, one-way audio, an adjustable lens, and four times digital zoom. A wall/ceiling mounting kit is included and the camera's off white housing blends into most environments.

Product Hardware Features

Rear Panel View

Rear Air Vents

Antenna

WPS button

LAN port

Power port   Reset button

- **LAN Port** – Connect Ethernet cables to your wired network devices.
- **Power Port** – Connect the included power adapter from your camera to an available power outlet.
  Note: Use only the adapter that came with your camera.
- **Reset Button** – Use an item such as a paperclip to push and hold this button for 3 seconds and release to reset your camera to its factory defaults.
- **WPS (Wi-Fi Protected Setup)** – Push and hold this button for 3 seconds to activate WPS. The button LED is blinking green when WPS is activated.
- **Antenna** – 2dBi detachable antenna

Front Panel View

Microphone

Light Sensor

IR LED

Camera Lens

Focus Ring

Privacy button   Power/Link LED

- **IR LED** – Built-in 4 IR LED for night vision uses. (for TV-IP851WIC)
- **Light Sensor** – Detects the light source to turn IR on or off.
- **Focus Ring** – Turn to adjust the focus of the camera.
- **Microphone** – Built-in microphone for audio can be turn on or off.
- **Privacy button** – Press the privacy button to redirect the camera's viewing position to a downward and obscured view. To return the camera to the previous viewing position, wait 5 seconds and then press the privacy button again.
- **Power** - This LED indicator is solid blue when your camera is powered on. Otherwise if this LED indicator is off, there is no power to your camera.
- **Link** – This LED indicator is blinking orange when there is connection/data to your camera.

Installation

Wired Connection

1. Connect the Ethernet Cable

    If you intend to use the network camera as a wired device, connect one end of the included Ethernet cable into the **Ethernet** port on the rear panel of the camera and connect the other end to an available port on your network. If you prefer to use the camera on a wireless network, see below for instructions on connecting the power adapter.
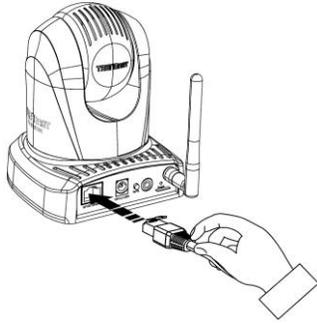
2. Attach the Power Supply

    Attach the included power supply to the **DC 12V 1.25A** receptor on the rear panel of the camera and then connect it to a wall outlet or power strip. A blue LED will light up under the lens indicating that the camera has power.
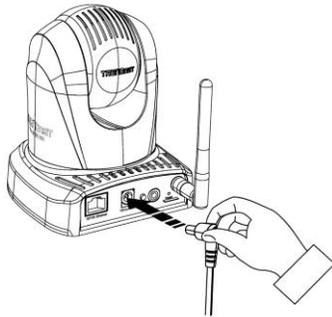
WPS Connection

An alternative method of connecting your camera to your network is by using WPS. WPS is a quick, simple and secure method of adding devices to a network. If you have a router which supports WPS follow the steps below, otherwise, please use the wired mode of setting up the camera.

1. Attach the Power Supply
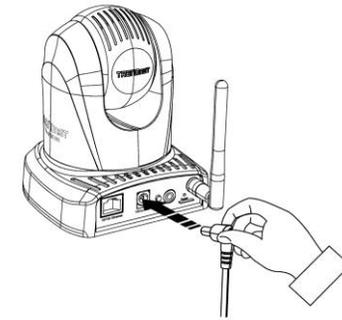
2. Press the WPS button on your wireless device then press the WPS button on the camera.

Wall mount installation

To attach the metal plates carry out the following:

- Remove the two rubber pads under the base of the Camera.
- Slide the metal plate onto the base of the camera, making sure that the two holes on the base of the camera align with the two screw holes on the base of the camera.
- Secure the metal plate to the base of the Camera with the two screws provided.
- The camera can now be mounted to the ceiling or a wall. See the diagram below for more information.
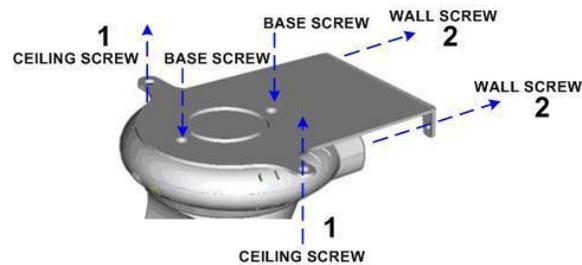
Starting the TRENDnet Cloud Service

Note: (Connect the camera to the Internet and make sure its accessible to the web).

1. Look underneath the camera for a similar **URL**
    (http:**//11223344.cam.trendnetcloud.com**) on the label.
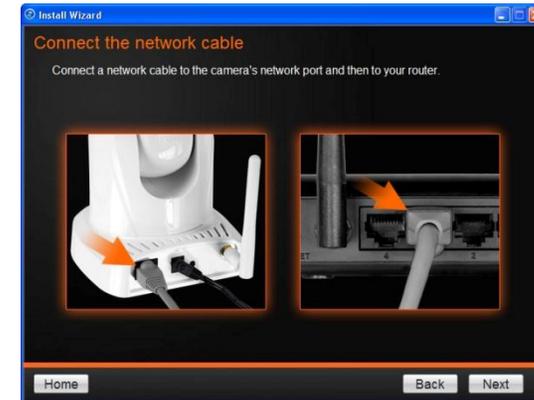2. Connect the power cable to the camera.

There are two methods to connect to the Internet, **wired** and **wireless**. For wireless, follow the instructions from **Image A** below. For wired, follow the instructions from **Image B** below.

Image A (connecting using WPS)

Image B (wired connection)

3. Open your browser, type the URL listed on the label of your camera and hit Enter to connect to the camera's live stream. Please note: you can also use this URL to connect to the camera from any location or computer.

There are three modes when connecting your TV-IP851WC/TV-IP851WIC to the web. This is visible through the "cloud" at the top right side of the web interface.

Blue Mode

The Blue Mode indicates the camera is connecting directly to the internet or local network. This mode offers configuration and management options.

Green Mode

The Green Mode indicates the camera is connecting to media in a peer-to-peer fashion to the Internet or local network. This mode doesn't offer configuration and management options – only live streaming.

Red Mode

The Red Mode indicates the camera is connecting to the Internet or local network through a firewall. This mode doesn't offer configuration and management options – just live streaming for 60 seconds. The firewall settings limits live streaming for each user. The "red" notification at the bottom of the viewing area warns users of the limited time. Refresh this screen continuously if you wish to view your camera's live stream.

Using the AutoRun Wizard

Insert the included CD-ROM into your CD/DVD drive. The **Install Wizard** program will run automatically.

Note: If the Install Wizard does not run, you may have **autorun** disabled on your machine. In this case, browse to the CD drive and run **InstallWizard.exe** to begin the installation wizard.

Begin by selecting a language from the drop-down list. There is a choice of five languages **– English, French, German, Russian, and Spanish**. Next, click **Install Camera** and follow the on-screen steps to continue the installation.
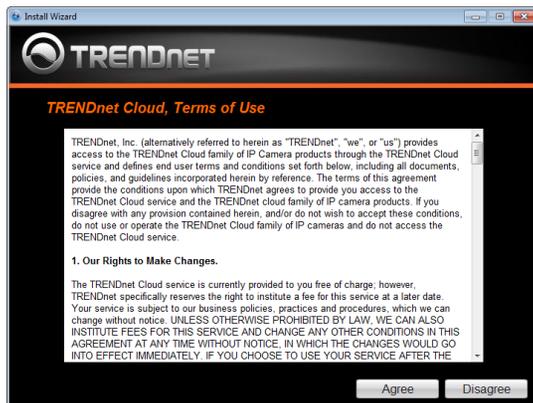
English

French

German

Russian

Spanish

1. This is TRENDnet's Terms of Use. Click **Agree** to continue.

2. The next step references information on the camera itself. Go to your camera and check the details at the bottom of the device. Click **Next** to continue, **Back** to go to the previous screen or Home to return to the **Main Menu**. Also enclosed, is a sticker with the same details attached.

3. The most important part of the setup process is the network connection type. There are three options:

   a. Connect camera to your wireless network using Wi-Fi Protected Setup (WPS) button (Verify your router has a WPS button. If not, select the next option).

   b. Connect camera to your wireless network manually

   c. Connect camera to your network using a network cable.
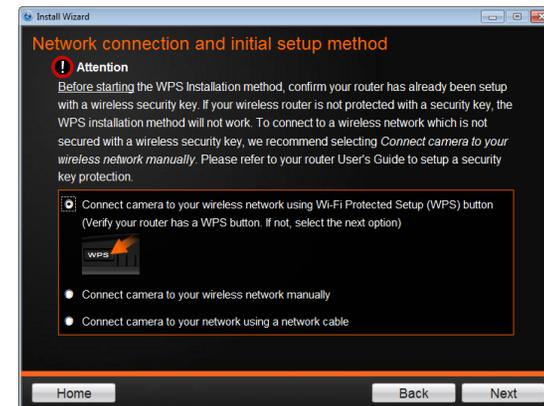
4. The basic connection type is "**C**" using a network cable. Let's begin the installation process using the network cable connection first. Click this **radio**
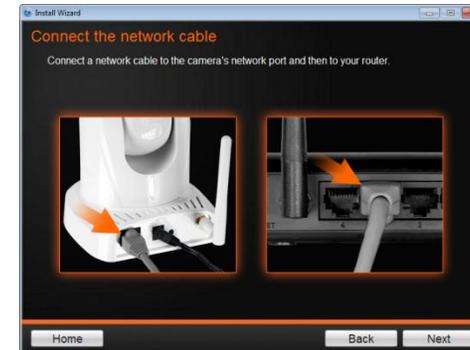
button and click **Next** to continue, **Back** to go to the previous screen or **Home** to return to the **Main Menu**.
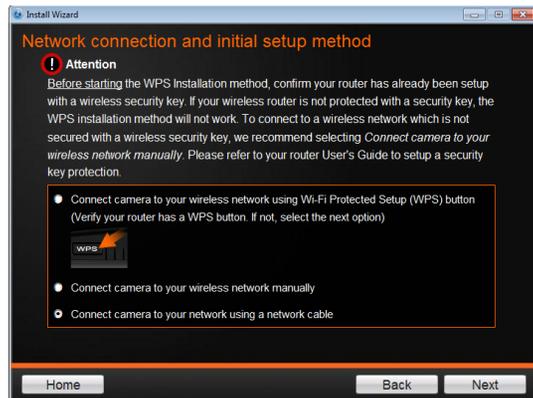

5. Follow the instructions in the next screen to **Power up the Camera**. Connect one end of the power adapter to the camera and watch the LED flicker. Click **Next** to continue, **Back** to go to the previous screen or **Home** to return to the **Main Menu.**


6. Connect one end of the network cable to your camera and the other end to your router. Click **Next** to continue, **Back** to go to the previous screen or **Home** to return to the **Main Menu.**

7. The wizard searches the network for your camera.
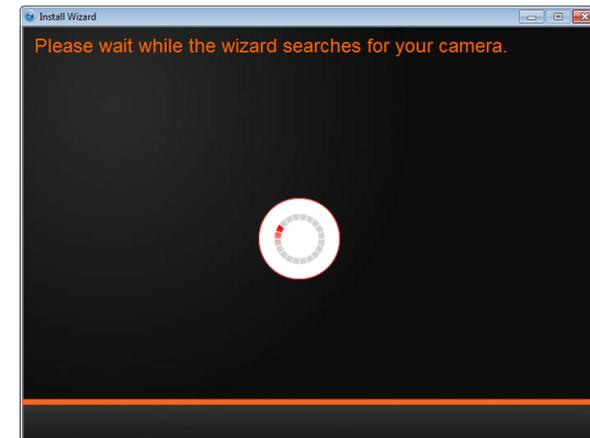
8. If you only have one camera on your network, the wizard will automatically select it (as shown below). Otherwise, if you have more than one camera, it provides several options from the list. The wizard provides the **Model Name** and **MAC Address** of the camera. If you do not see any of your camera(s) in the wizard, click **Retry** to scan for the camera again. Click **Next** to continue, **Back** to go to the previous screen or **Home** to return to the **Main Menu.**
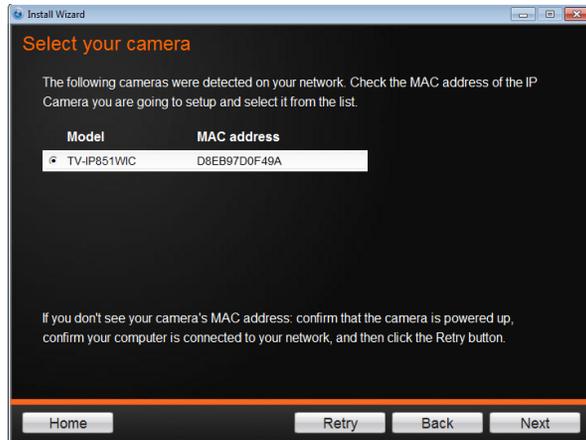
9. Password Settings. Follow the instructions on the screen. Remember to change the password with an 8 bit preset. The default username and password is **admin**. Tick the **Change Password** checkbox to enter the new password details. The password should be between 8 and 16 characters. Click **Next** to continue, **Back** to go to the previous screen or **Home** to return to the **Main Menu**.
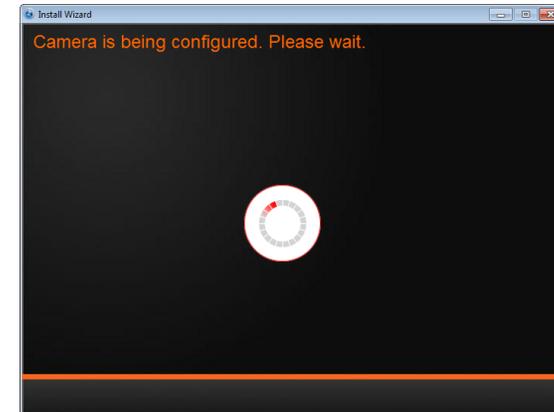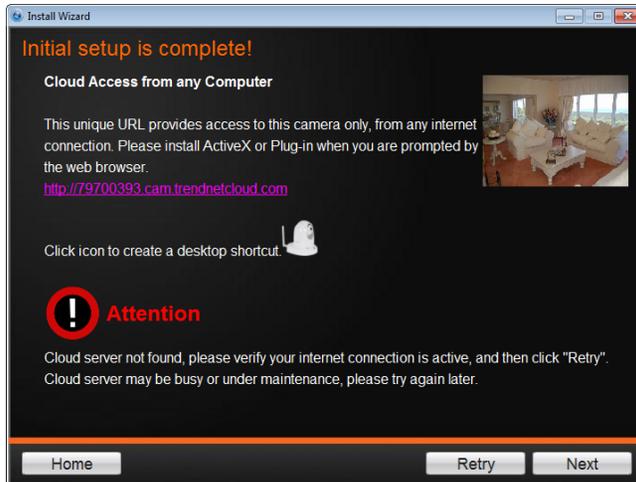
10. The wizard configures your parameters.

11. The initial setup is complete. The main feature is the Cloud Access accessibility feature. Click the link(s) or icon below to create a shortcut on your desktop. Also, below the icon is a warning. This warning is only shown when the internet connection is inactive or the Cloud server cannot be found. Make sure the internet connection is active, click **Retry**. When the Cloud server isn't found, the server may be busy or under maintenance. Under these circumstances, click **Retry** later again. If there is no warning, click **Next**.

12. The mobile option allows the user to download the **TRENDnet Cloud App** in either Apple or Google android format. To use this feature, the user must have a Barcode Scanner App on their mobile device. This is also available from the Apple App Store or Google's Play. You are now ready to use your camera. Click **Finish** to exit.

You are now ready to use your camera. Click **Finish** to exit.

Wireless Connection

Using WPS
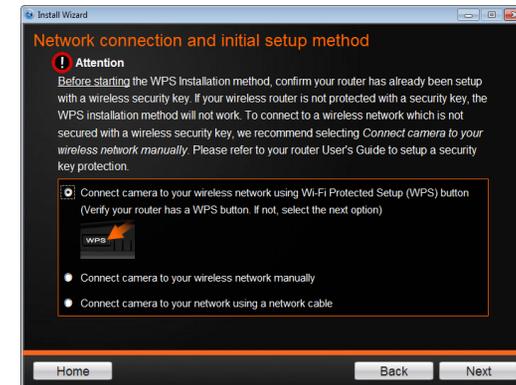
- Find the access point (AP) or wireless router you wish to connect to from the **Available AP** drop down menu.
- In most cases you should leave the **Channel** set to **Auto** as the AP will determine the channel of operation.
- Select the type of **authentication** and **encryption** required by the access point and enter the **Key** required to connect.

Click **Next** to continue, **Back** to go to the previous screen or **Home** to return to the **Main Menu.**

Please read the next steps carefully as it pertains to the WPS feature on your router and camera.

1. Follow the instructions in the screen to **Power up the Camera**. Click **Next** to continue, **Back** to go to the previous screen or **Home** to return to the **Main Menu.**
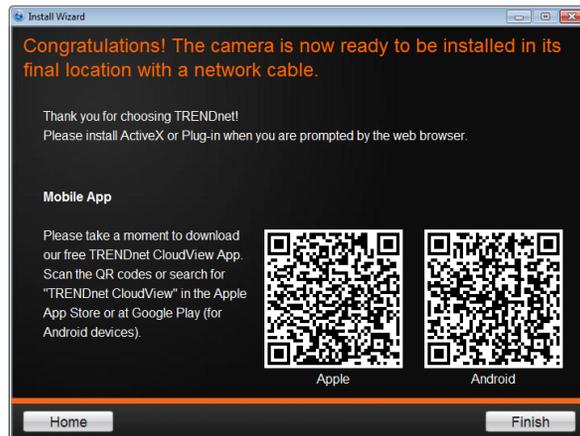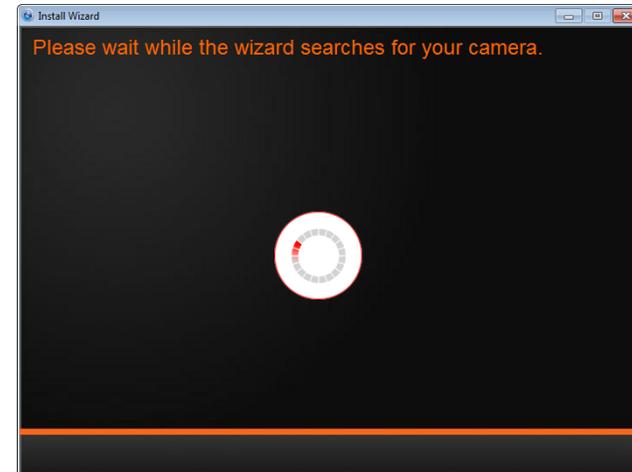
2. Follow the instructions and click **Next** to continue. If you wish to go to the previous screen, click **Back** or **Home** to return to the main menu.

3. The camera now searches for the settings you chose.

4. If you only have one camera on your network, the wizard will automatically select it (as shown below). Otherwise, if you have more than one camera, it provides several options from the list. The wizard provides the **Model Name** and **MAC Address** of the camera. If you do not see any of your camera(s) in the wizard, click **Retry** to scan for the camera again. Click **Next** to continue, **Back** to go to the previous screen or **Home** to return to the **Main Menu.**

5. Password Settings. Follow the instructions on the screen. Remember to change the password with an 8 bit preset. The default username and password is **admin**. Tick the **Change Password** checkbox to enter the new password details. The password should be between 8 and 16 characters. Click **Next** to continue, **Back** to go to the previous screen or **Home** to return to the **Main Menu**.

6. The wizard configures your parameters.

7. The initial setup is complete. The main feature is the Cloud Access accessibility feature. Click the link(s) or icon below to create a shortcut on your desktop. Also, below the icon is a warning. This warning is only shown when the internet connection is inactive or the Cloud server cannot be found. Make sure the internet connection is active, click **Retry**. When the Cloud server isn't found, the server may be busy or under maintenance. Under these circumstances, click **Retry** later again. If there is no warning, click **Next**.
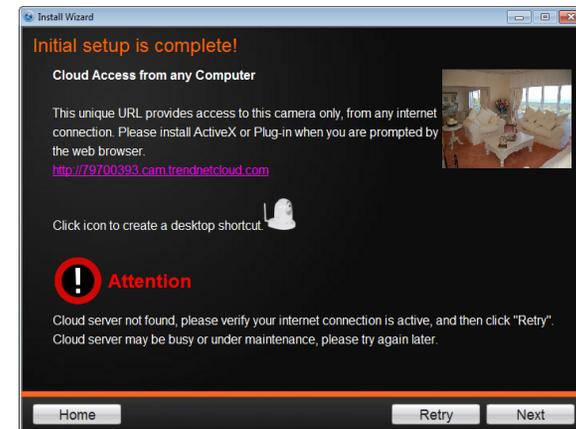
8. The mobile option allows the user to download the **TRENDnet Cloud App** in either Apple or Google android format. To use this feature, the user must have a Barcode Scanner App on their mobile device. This is also available from the Apple App Store or Google's Play. You are now ready to use your camera. Click **Finish** to exit.

You are now ready to use your camera. Click **Finish** to exit.

Connecting Wireless Network Manually
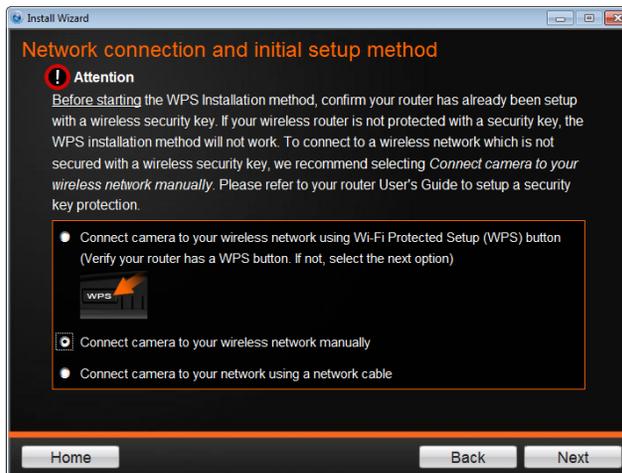
1. Follow the instructions in the next screen to **Power up the Camera**. Click **Next** to continue, **Back** to go to the previous screen or **Home** to return to the **Main Menu.**
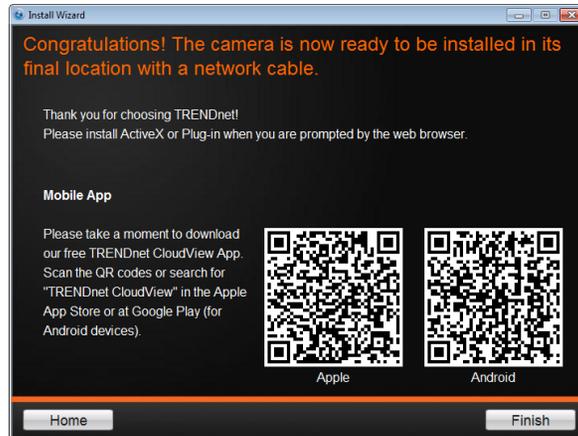

2. Connect one end of the network cable to your camera and the other end to your router. Click **Next** to continue, **Back** to go to the previous screen or **Home** to return to the **Main Menu.**
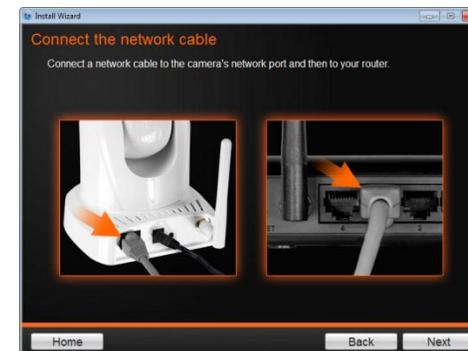
3. The wizard searches the network for your camera.

4. If you only have one camera on your network, the wizard will automatically select it (as shown below). Otherwise, if you have more than one camera, it provides several options from the list. The wizard provides the **Model Name** and **MAC Address** of the camera. If you do not see any of your camera(s) in the wizard, click **Retry** to scan for the camera again. Click **Next** to continue, **Back** to go to the previous screen or **Home** to return to the **Main Menu.**

5. Password Settings. Follow the instructions on the screen. Remember to change the password with an 8 bit preset. The default username and password is

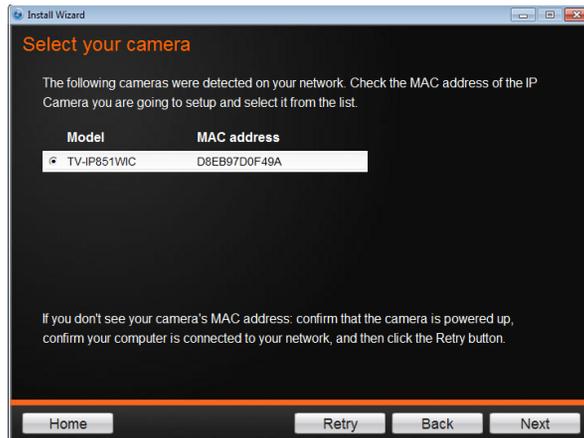**admin**. Tick the **Change Password** checkbox to enter the new password details. The password should be between 8 and 16 characters. Click **Next** to continue, **Back** to go to the previous screen or **Home** to return to the **Main Menu**.

6. The wizard configures your parameters.

7. Once your wireless network is discovered, the wizard provides you with an option to select the **Available Wireless Network** and also to provide a **Wireless Network Password**. If you do not see your wireless network details, click the **Rescan** link to scan the network again.
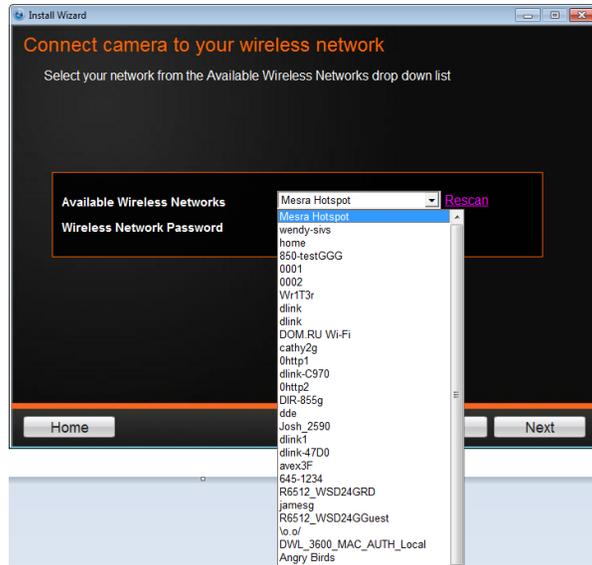
8. The wizard searches for wireless Access Points. Click the Rescan button at any time if you want to find your AP. Once it finds the wireless AP you are looking for, select it and enter the wireless network password of the AP. Click Next to continye
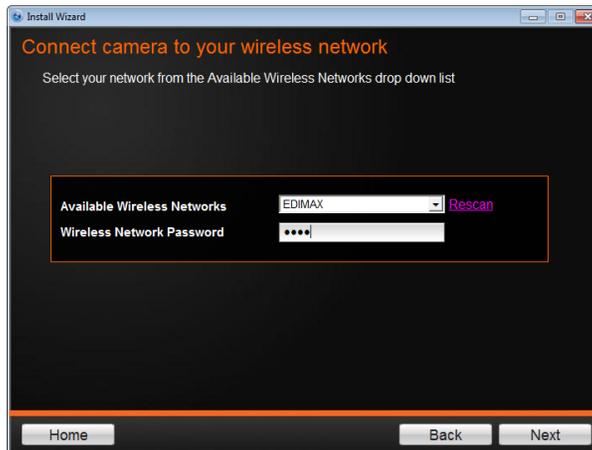
9. Next, you are prompted to disconnect your network cable from the camera/router. Click **Next** to continue, **Back** to go to the previous screen or **Home** to return to the **Main Menu.**
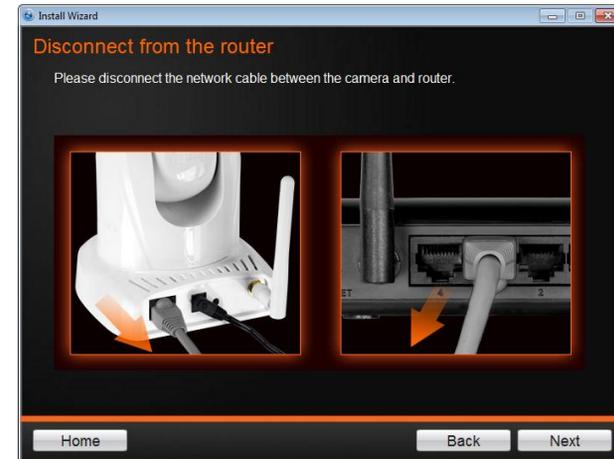
10. The camera is connecting to the wireless network.
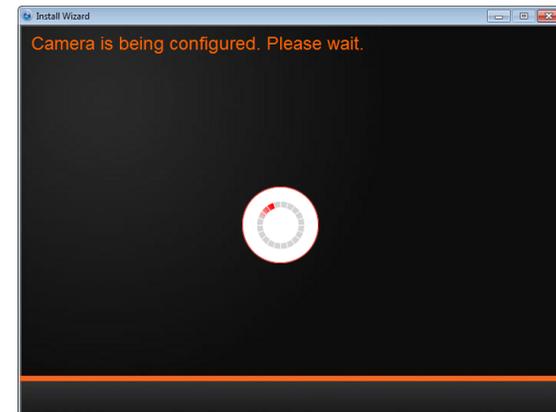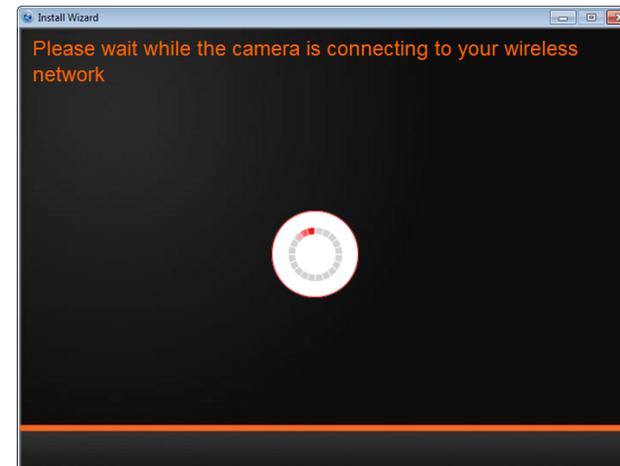
11. The initial setup is complete. The main feature is the Cloud Access accessibility feature. Click the link(s) or icon below to create a shortcut on your desktop. Also, below the icon is a warning message. This warning message is only shown when the internet connection is inactive or the cloud server cannot be found. Make sure the internet connection is active, click **Retry**. When the Cloud server isn't found, the server may be busy or under maintenance. Under these circumstances, click Retry again. If there is no warning, click **Next**.
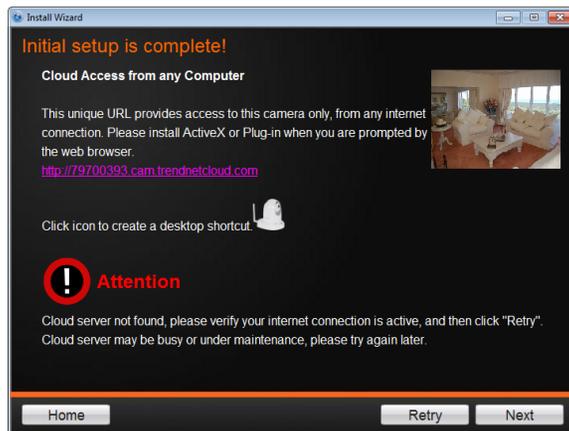
12. The mobile option allows the user to download the **TRENDnet Cloud App** in either Apple or Google android format. To use this feature, the user must have a Barcode Scanner App on their mobile device. This is also available from the Apple App Store or Google's Play. You are now ready to use your camera. Click **Finish** to exit.
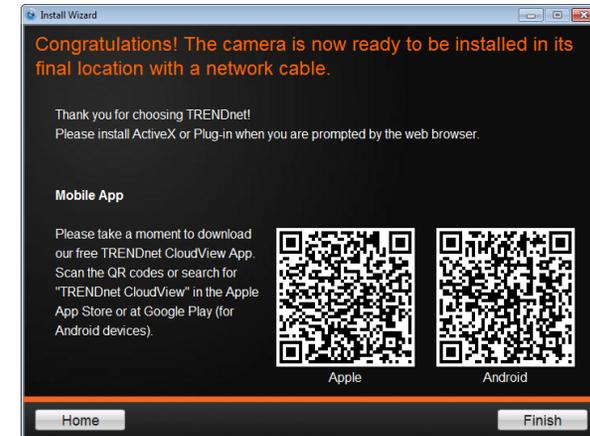
You are now ready to use your camera. Click **Finish** to exit.

Mobile Apps

Using your mobile device, in this example it is an **Android** phone, touch the **Bar Code** scanning app on your phone. Hold it up to the **QR Code** on the wizard that reads, **Android**, and snap to scan the image. The **Bar Code** app will read the QR Code and record it.

The app copies the QR link and provides a HTML link to the TRENDnet app. Click on the link.
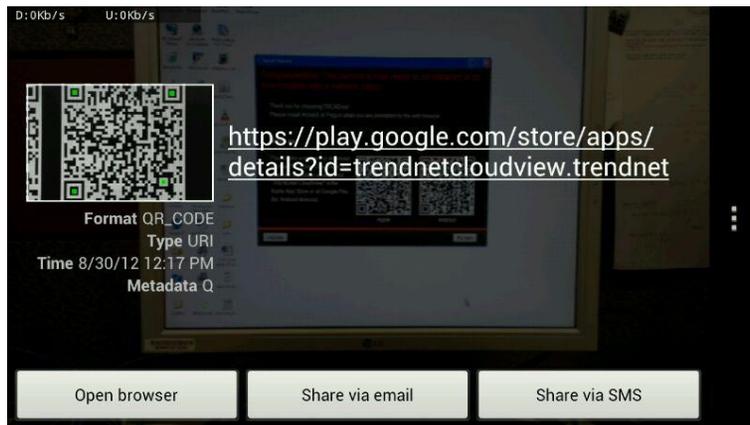
You will be directed to the **Google Play Storefront** to download the app.
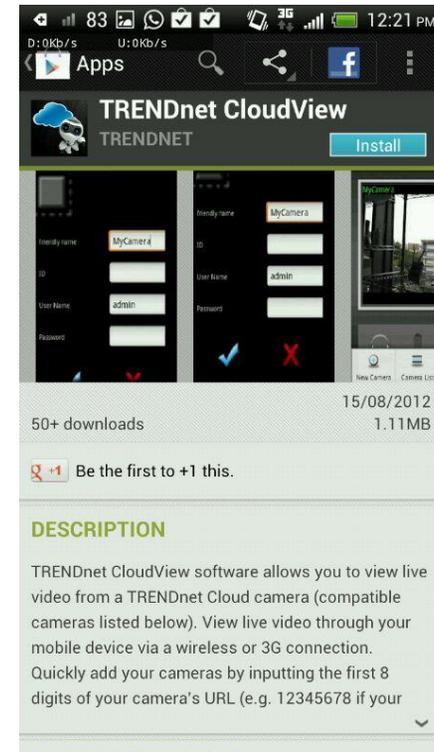
Download the app, install it and use the app on your mobile device to view the TRENDnet camera.

Here is Apple iTunes version
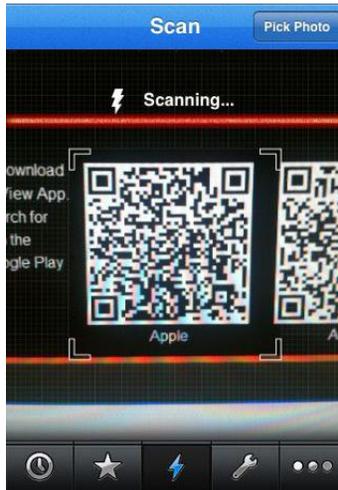
Scan the QR Code using one of IOS's QR Code apps. The app automatically creates an HTML link to the iTunes App Store. Link the link.

You are immediately directed to the iTunes App Store. Click the link to download.

Configuration

After completing the AutoRun Wizard, you are ready to use your camera. The camera's built-in Web configuration utility is designed to allow you to easily access and configure your TV-IP851WC or TV-IP851WIC camera. Open a web browser such as Internet Explorer® and enter the IP address of your camera (Default IP Address: http://192.168.10.30). To log in, use the User name **admin** and the password you created in the Setup Wizard. If you did not create a password, the default password is **admin**. After entering your password, click **OK**.
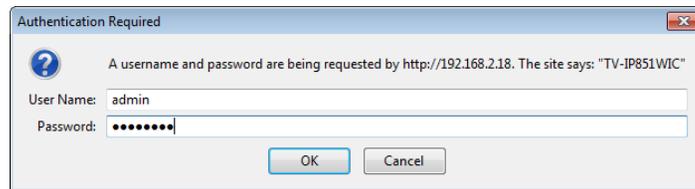
If you did not use the AutoRun Wizard to set up your camera, the following page appears when you first login.

When you log in at the first time, the TRENDnet Cloud Terms of Use appears. Tick the **Accept** check box and click **Next**.
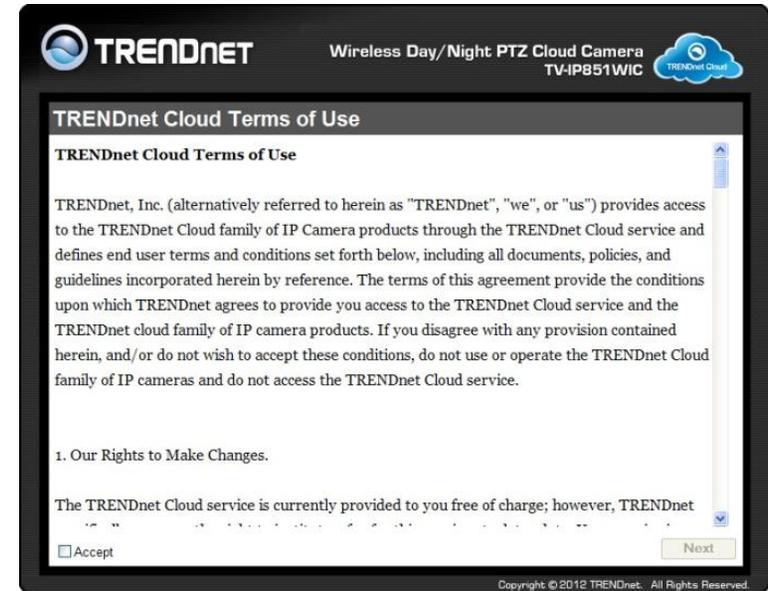
The Change Your Password page appears. Configure all the information and click **OK**. This page only appears at the first time log in.

The Congratulations page appears. Click **Login** to go to the Login page again. To log in, enter the Username **admin** and the newly created password. This page only appears at the first time log in.
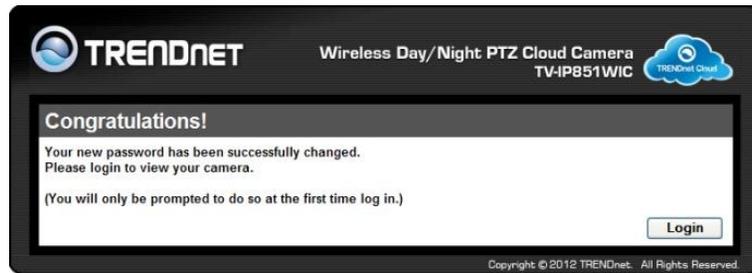
The home page for the TV-IP851WC or TV-IP851WIC appears.

Viewing Video

Click **VIEW VIDEO | ACTIVEX** or **VIEW VIDEO | JAVA** to begin viewing live video from your camera.

VIEW VIDEO | ACTIVEX

Before enabling this feature make sure your system is upgraded with the latest Active X plug-in updates. Windows users who do not have Java installed can choose ActiveX mode to view video. Internet Explorer will prompt you to install ActiveX when you click on the **VIEW VIDEO | ACTIVEX** link. Mac users must use the Java mode to view video.

VIEW VIDEO | JAVA

Please make sure that you have the latest version of Java installed on your machine to ensure proper operation when viewing video in Java mode. The Java application can be downloaded from Sun's website free of charge (http://www.java.com)

Viewing Camera Settings

To view camera settings:
1. Login to the camera
2. Click **ADMINISTRATION**. The system status screen appears.

From the menu on the left side of the screen, select an option under the **STATUS** heading.

System

This screen shows the Camera Name, Location, Model, Firmware Version, MAC Address, IP Address, Ethernet Link Status, Speed and Duplex type.
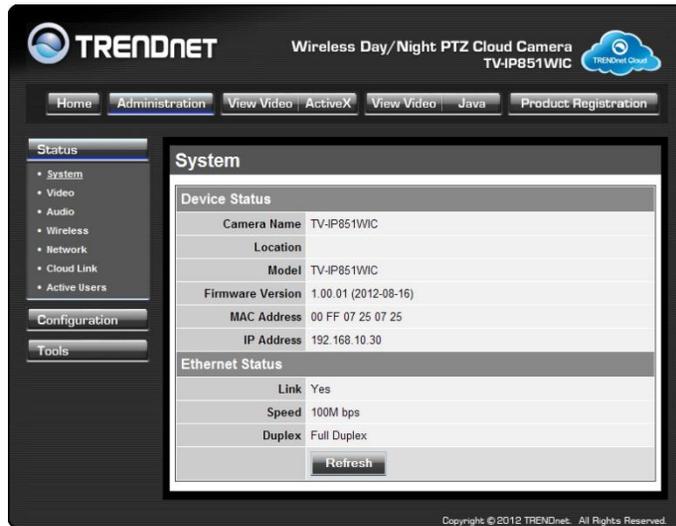
Video

This screen shows the details of the video capture settings including Video Resolution, Compression Rate, Frame Rate, Frame Size and Light Frequency.

Audio

This screen shows whether audio is enabled and the volume level of the audio.

Wireless

This screen shows the connection mode, link status, SSID name, channel and encryption status.

Network

This screen shows various network statistics related to your camera including IP Address, Subnet Mask and Default Gateway.

Cloud Link

This screen shows the Cloud server URL and its status.
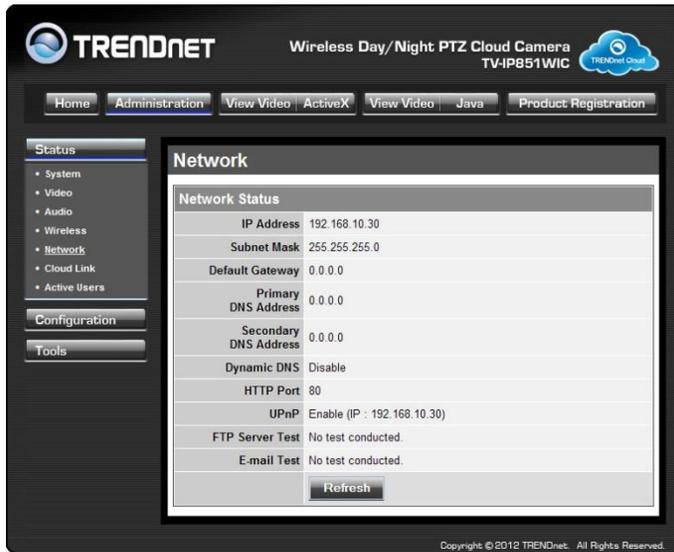
Active Users

This screen shows whether there are any active users logged on to the camera viewing live video.

Configuring Camera Settings

The TV-IP851WC/TV-IP851WIC allows you to make configuration changes from anywhere by connecting to the camera using a standard web browser.

To configure camera settings:

1. Login to the camera as described in the section **Using the web-based configuration interface.**
2. Click **ADMINISTRATION**. The system status screen appears.
3. Click **CONFIGURATION** from the menu on the left side of the screen. The System configuration screen is displayed. You can then click any of the menu items on the left of the screen under the Configuration menu to modify settings.
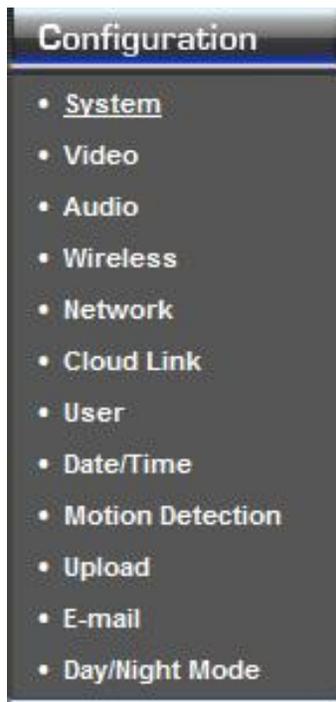
System

- **Camera Name:** This is the name used to identify your camera on your network.
- **Location:** You can enter a description of the place where the camera is.
- **Admin:** In this field you can change the administrator user name and password. (Max. password length is 8 characters)
- **LED Control:** Setting this to **Normal** will display the lights on the front of the camera indicating power and network activity. Setting this to **OFF** will turn off both lights on the front of the camera.
- **Privacy button:** When privacy feature is enabled, you can turn on and off the privacy mode by pressing the Privacy button for 5 seconds. When privacy feature is disabled, the privacy button will not take action.

Video

- **Video Resolution:** Select from one of the three resolutions. Higher values provide better quality but at the expense of higher bandwidth requirements on your network or Internet connection.
- **Compression Rate:** Select a compression rate. Higher rates of compression will reduce network load at the expense of lower image quality.

- **Frame Rate (Frames/Sec.):** Select the number of frames per second you would like for your video. Higher rates provide smoother video but require more bandwidth on your network or Internet connection.
- **Brightness Control:** Allows you to control the brightness level. Enter a value between 1 and 128.
- **Contrast Control:** Allows you to control the contrast level. Enter a value between 1 and 128.
- **Saturation Control:** Allows you to control the saturation level. Enter a value between 1 and 128.
- **Light Frequency:** Select the correct frequency (50Hz/60Hz) to reduce the amount of flicker.
- **Mirror:** Choose whether to mirror the image horizontally or vertically.
- **Anti-Flicker:** Check the box to enable anti-flicker.
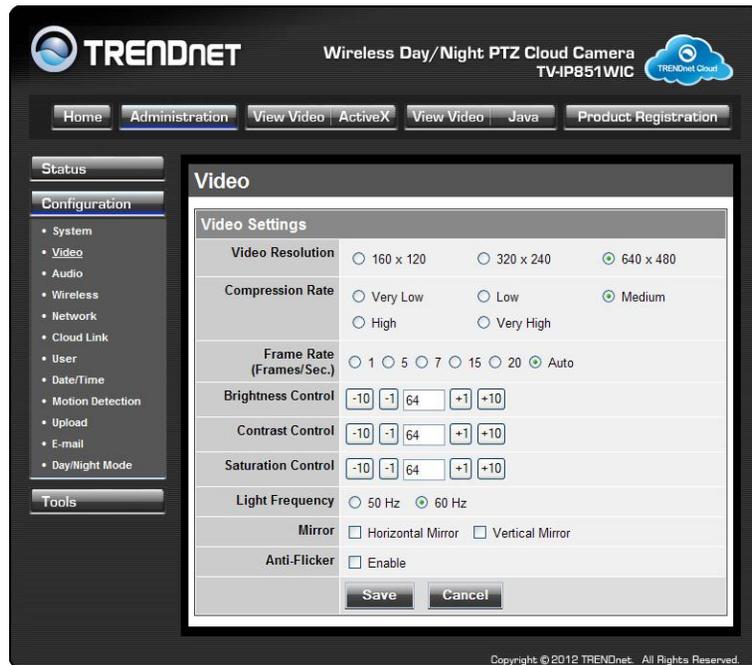
Audio
- **Audio:** Choose whether to **Enable** or **Disable** the camera audio feed.
- **Volume:** Select the volume percentage level.
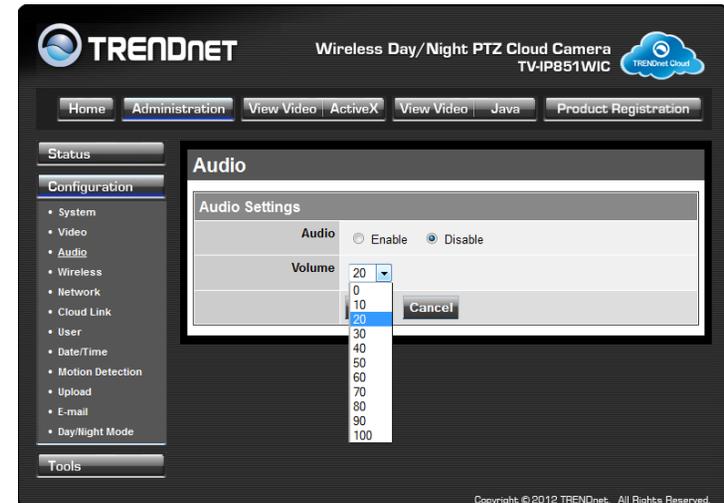
Wireless

- **Connection Mode: Infrastructure** is a wireless connection using an access point as a transmission point of all wireless devices. **Ad-Hoc** is a wireless connection used without an access point, where your TV-IP851WC or TV-IP851WIC is directly connected to your PC. This is done using the on-board wireless adapter on the TV-IP851WC or TV-IP851WIC connected to a wireless adapter on the PC.
- **SSID:** Service Set Identifier. This is an identifier for your network. Manually enter the SSID of your wireless network or select it from the drop down menu. You can click **Site Survey** to see a list of wireless networks within range and further details of their settings.
- **Wireless Channel:** When using Infrastructure mode, the channel is specified by the access point and the channel will not be selectable on this menu. When using Ad-Hoc mode, you can specify on which channel you want to communicate with the camera.
- **Encryption Type:** It is highly recommended that you encrypt the connection. In Infrastructure mode, select an encryption type and enter details where applicable as you have specified on the access point. If you intend to use Ad-Hoc mode, you can specify here the encryption type and preshared key that you want to use to connect from the PC.
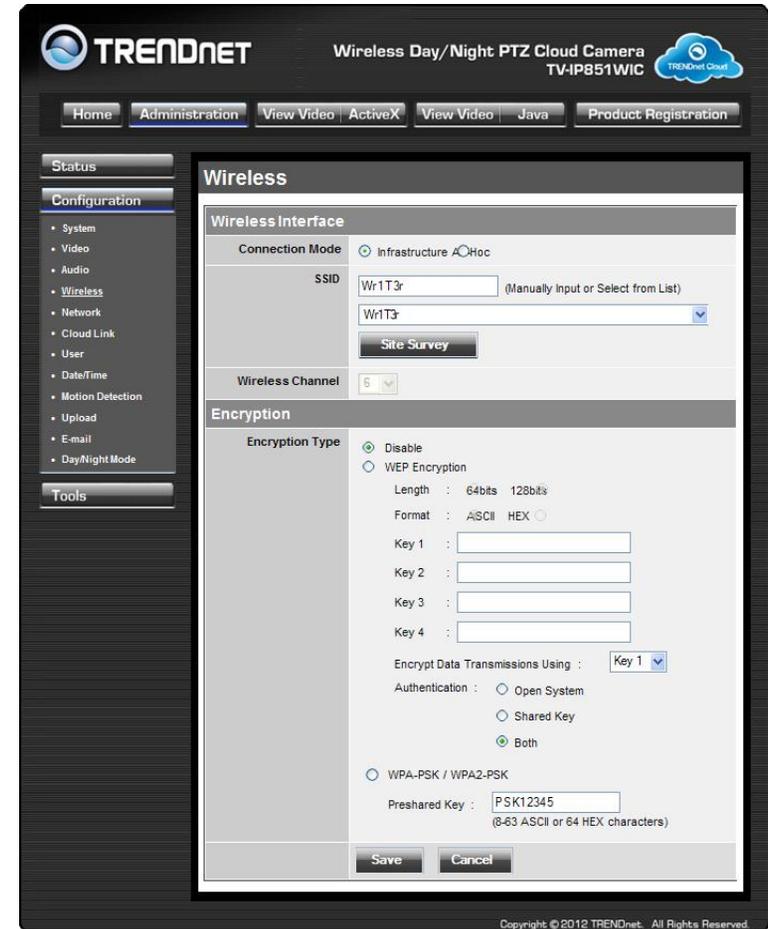
Network

- **IP Address Mode:** Choose a method to assign an IP address to your camera.
  - o **Fixed IP** – If you want to assign a static or fixed IP address to the camera, you may do so here. Your network administrator should be able to provide you with the necessary details to complete this section.
  - o **Dynamic IP (DHCP)** – Allows a DHCP server to automatically assign the camera a network address.
  - o **PPPoE** – If you are using a PPPoE connection, enter your user name and password here
- **DNS IP Address:** Enter the Domain Name Server addresses which translate names to IP addresses.
- **Dynamic DNS:** The Dynamic DNS feature allows you to host a server (e.g. web server, FTP or Game server) using a domain that you own with a dynamically assigned IP address. Many ISPs assign IP addresses dynamically i.e. the IP address changes each time you connect and disconnect. Using a Dynamic DNS service provider, you can connect to your camera no matter what your IP address. Enter the details of your dynamic DNS service provider here.
- **HTTP Port:** You may configure a second HTTP port that will allow you to connect to the camera using a standard web browser. The port can be set to a number other than the default TCP ports 80. A corresponding port must be opened on the router. For example, if the port is changed to 1010, users must type "http://192.168.0.100:1010" instead of only "http://192.168.0.100".
- **UPnP & UPnP Port Forwarding:** Enable these to set your camera as a universal plug n play device on your network and for remote access.

Cloud Link

- **Cloud Link:** Click the radio button to Enable or Disable cloud server syncing.
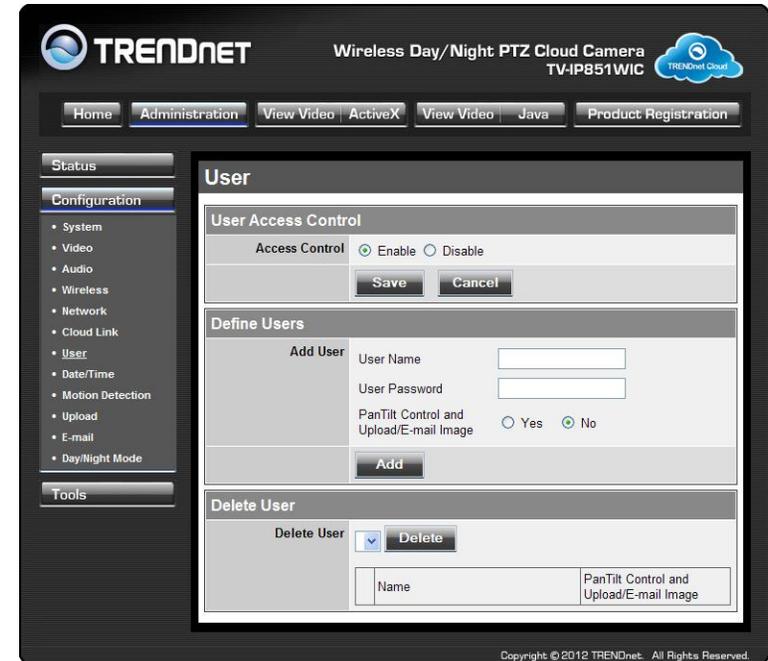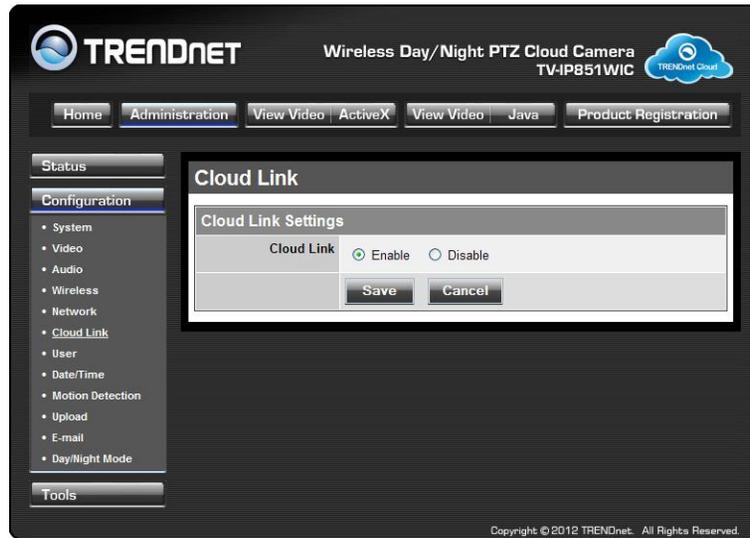
User

- **User Access Control:** Enable this to allow user accounts to connect to the camera. This option also enable/disable the authentication for direct view.
  For Java mode: http://camera_ip_address/tvjview.htm
  For ActiveX mode: http://camera_ip_address/tvaview.htm
  (eg. http://192.168.10.30/tvaview.htm to view the camera live image directly)

- **Define Users:** You can create new user accounts here. Enter a user name and password and select whether the user is allowed to upload or email an image from the camera.
- **Delete User:** Select a user from the drop down menu and click the **Delete** button to remove a user account from the camera.

Date/Time

- **Synchronized with Time Server:** If you have an Internet time server or have an NTP server designated on your network, you can specify the IP address of it here. Ensure that you select the correct time zone for the camera also.
- **Set Manually:** If you prefer to manually set the time for the camera, select this mode. You can check the box **Synchronized with Computer Time** to set the time on the camera to be the same as the computer you are on.

Motion Detection

- **Motion Detection:** Select whether to **Enable** or **Disable** motion detection. This will allow your camera to perform different functions when activity has been detected in the parts of the screen that you specify.
- **Sensitivity:** Set a percentage level to determine how sensitive the camera is to activity.
- **Detection Areas:** From the live image shown on this screen, you can left-click on blocks of the grid shown to indicate which parts of the screen you would like to monitor for motion.
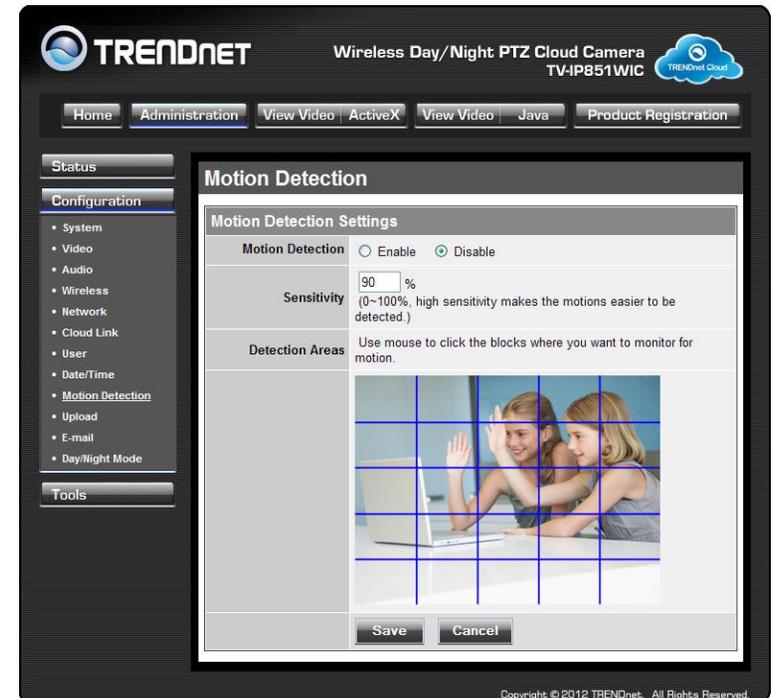
Upload

On this screen you can enter details of an FTP Server that you want to upload images from the camera to.

- **Host Address:** The IP address of the FTP Server
- **Port Number:** The port number to connect to the FTP on, default port is 21.
- **User Name:** The user name of the FTP account.
- **Password:** The password for the user account on the FTP.
- **Directory Path:** The path you want the files to be uploaded to on the FTP.
- **Passive Mode:** If the camera is behind a firewall, you might wish to enable Passive mode to allow the camera to upload the pictures.
- **Time Schedule:** Check **Enable upload image to FTP server** to enable the Upload function.
    - o **Always:** Selecting this option allows snapshots to be uploaded to your FTP as soon as you click **Save.**
    - o **Schedule:** Selecting this option allows you to configure specific times when you want the snapshots to be uploaded to your FTP server.
    - o **Motion Detection:** Selecting this option sets the camera to upload images upon detection of motion.
    - o **Manual Operation:** Selecting this option means the user is responsible for taking a snapshot from the camera to upload.
- **Image Interval:** Users can select in frames per second (1, 2, 3 or auto, in auto this could go to 4). The user can also select a duration for each frame from 1 to 65535 seconds.
- **Base File Name**: Enter the prefix for the filename of each snapshot taken by the camera.
- **File**: If **Overwrite** is selected, only a few images will be constantly refreshed, depending on how many snapshots you choose to have sent. Select **Date/Time Suffix** and the pictures will be named with a date and time also. Select a **Sequence Number Suffix** up to 1024 and all the pictures will be numbered from 1-1024. Up to 1024 pictures can be configured. Picture number 1025 will reset to number 1.

E-mail

This section allows you to configure the email notification settings of your camera.

- **SMTP Server Address:** The domain name or IP address of your external mail server.
- **SMTP Port Number:** The port number of your mail server, usually this is port 25.
- **Sender's Email Address:** The e-mail address of the person sending the camera snapshots.
- **Recipient's E-mail Address:** The e-mail address of the person receiving the camera snapshots.
- **User Name:** The user name of the sender's email account for SMTP authentication.
- **Password:** The password of the sender's account for SMTP authentication.
- **Use SSL-TLSS/STARTTLS:** If your mail server supports SSL-TLSS or STARTTLS, you can select one of these methods to create an encrypted connection to the mail server.
- **Time Schedule:** Check **Enable e-mail image to e-mail account** to enable the time schedule function.
    - **Always:** Selecting this option will allow snapshots to be emailed when you click **Save**.
    - **Schedule:** Selecting this option allows you to configure specific times when you want the snapshots to be emailed.
    - **Motion Detection:** Selecting this option sets the camera to e-mail images upon detection of motion.
    - **Manual Operation:** Selecting this option means the user is responsible for taking a snapshot from the camera to e-mail.

Day/Night Mode (for TV-IP851WIC)

This section lets you configure the Day/Night vision modes on the IP camera.

- **Auto:** The camera automatically detects the level of light and selects night vision or normal mode.
- **Manual:** Night mode can be selected on the view video ActiveX and Java tabs.
- **Always Day Mode:** Day mode is always selected.
- **Always Night Mode:** Night mode is always selected. This option is best used areas of low lighting.
- **Day Mode Schedule:** using the time tabs 00:00 ~ 00:00, it is possible to select times for normal mode. Times outside this will be in night mode. The times need to be entered in a 24 hour format. For example, 08:00 ~ 18:30.
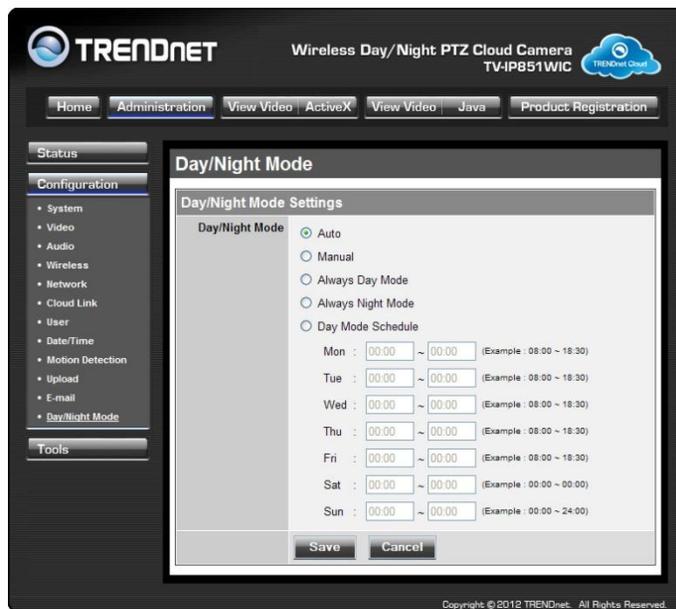
Tools

The TV-IP851WC/TV-IP851WIC provides useful .tools to detect the connection, restart the camera, upgrade firmware, and backup and restore files.

To use camera tools:

1. Login to the camera as described in the section **Using the web-based configuration interface.**
2. Click **ADMINISTRATION**. The system status screen appears.
3. Click **Tools** from the menu on the left side of the screen. The Tools screen is displayed. You can then click any of the menu items on the left of the screen under the Tools menu.
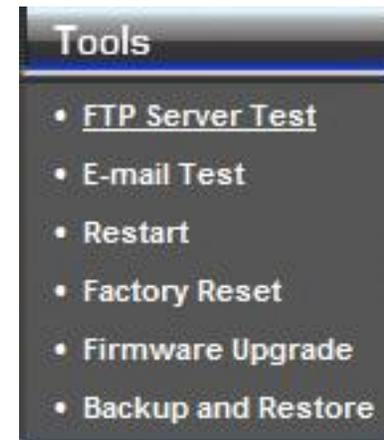
FTP Server Test

When you have set up the FTP Server in the configuration section, you can use this screen to test that the FTP Server settings are correct. Pressing the Test button will make a connection to the FTP Server and upload a file called test_date_time.jpg to the FTP. If the file is not there, you should check that you have entered the FTP details correctly in the configuration section.

E-mail Test

When you have set up an e-mail account in the configuration section, you can use this screen to test that the E-mail settings are correct. Pressing the **Test** button will make the camera send a test e-mail to the address specified in the configuration section. If you do not receive the test e-mail, you should check that you have entered the e-mail details correctly in the configuration section.

Restart

If you should need to restart the IP camera, you can do this from this screen. Clicking **Yes** will initiate a reboot sequence on the camera. When you restart the camera you will lose your connection to it. Wait 1 minute before attempting to reconnect to the camera so that it has time to go through its boot up sequence. Restarting the camera will retain the configuration settings you have entered.

Factory Reset

If you should need to restore the camera to the factory settings, you can do it from this screen. Clicking **Yes** will initiate a reboot sequence on the camera. When the camera restarts, you will lose your connection to it. The username and password will also both be set back to the default **admin**. Wait 1 minute before attempting to reconnect to the camera so that it has time to go through its boot up sequence.

Note: Factory reset will erase the current configuration settings on the camera. You should back up the settings first if you wish to keep them. See the Backup and Restore section for more information.

Firmware Upgrade

Click the **Browse** button and locate the firmware file you saved on your computer and choose **Open**. When you are ready, click the **Upgrade** button to begin the firmware upgrade.
Note: Upgrading the firmware is a sensitive process. Be sure that you have the correct firmware for your model of camera and do not disconnect the power during the upgrade process.

Backup and Restore

When you have set up the camera and you are satisfied with the settings, you can backup the settings to a file for future reference. If you should change the settings and want to revert back to the previous settings, you can do so on this page. To backup the configuration, click **Backup** and select a location to save the file, then choose **Save**. To restore settings from a configuration file, click **Browse** and locate the backup configuration file on your hard drive then click **OK**. Click **Restore** to complete the process.

How to setup/access the camera remotely

You can either setup the Dynamic DNS connection via camera itself or your home router. An account from any of the listed DDNS providers is required prior to this operation.

Configure DDNS on your Camera

1. Go to Camera's **DDNS Setting** page, click **Enable** to activate the feature. Then select a DDNS provider from the list.

2. Enter your DDNS's the Host Name, User Name and Password.

3. In the **Port Number** section, assign an HTTP port of the camera. The default HTTP Port on the camera is 80. The example shows above is using port number 9000.

4. Open another web browser and go to your Router's Web Configuration page. (In the example, TRENDnet's TEW-651BR Wireless N router is used)
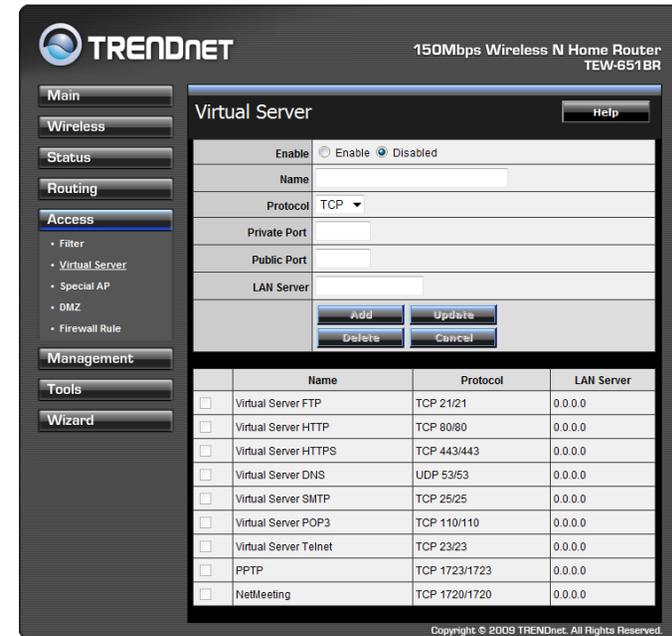
5. Go to **Virtual Server*** section and create a new entry.

   Enable: Click **Enable**
   Name: Enter the application name (eg. CameraName)
   Protocol: Select **TCP**
   Private Port: The HTTP port that you assign on your Camera.
   Public Port: The port used on remote side to access to your Camera.
   LAN Server: The local IP address of your Camera.

Then click **Add** to add the application.

* Please refer to your router's user's manual for detail **Virtual Server** setting. Some router might use **Port Forwarding** or **Special applications** for this function. The setup steps should be very similar.

6. Open another web browser and enter your DDNS domain and camera's port number.
http://yourDomainName:PortNumber

7. Camera's login page will appear.

Configure DDNS on your router

1. Go to Camera's **DDNS → Ports Number** section, assign a HTTP port for your camera and click **Apply**.

2. Login to your router's web configuration page.

3. Find the **Dynamic DNS** configuration section.

4. Enable DDNS, fill out the following information and then click **Apply**.

Dynamic DNS   Help

DDNS	⦿ Enabled ○ Disabled
Server Address	DynDns.com ▾
Host Name	trendnet.dyndns.org
User Name	trendnet
Password	●●●●●●●●●●●●●●●●
	Cancel Apply

5. Go to **Virtual Server*** section and create a new entry.

Enable: Click **Enable**
Name: Enter the application name (eg. Camera Name)
Protocol: Select **TCP**
Private Port: The HTTP port that you assign on your Camera.
Public Port: The port used on remote side to access to your Camera.
LAN Server: The local IP address of your Camera.

Virtual Server   Help

Enable	⦿ Enable ○ Disabled
Name	IP Camera
Protocol	TCP ▾
Private Port	9000
Public Port	9000
LAN Server	192.168.1.101
	Add Update
	Delete Cancel

Click **Add** to add the application.

* Please refer to your router's user's manual for detail **Virtual Server** setting.
Some router might use **Port Forwarding** or **Special applications** for this
function. The setup steps should be very similar.

6. Open another web browser and enter your DDNS domain and camera's port number.
    http://yourDomainName:PortNumber

    New Tab - Windows Internet Explorer
    http://trendnet.dyndns.org:9000

7. The camera login page will appear.

Technical Specifications

TV-IP851WC

Camera	
General	Sensor: 1/5" CMOS Sensor
	Board Lens
	Focal Length: 4mm
	F/No: 1.5
	Minimum illumination: 1 lux
	Focus Depth: 20 cm ~ infinity
	View:
	Horizontal: 38.0 degrees
	Vertical: 28.7 degrees
	Diagonal: 46.5 degrees
	Digital Zoom: 4x
Audio	Built-in omni-directional microphone
	Sensitivity: -38dB +/- 3dB (5 meters max.)
	Frequency: 100~20000Hz
	S/N: >60dB
	Format: PCM
Pan & Tilt	Pan: -170° ~ +170°
	Tilt: up 90°and down 25°
	Auto-Patrol preset positions: 24
Hardware	
Network	IEEE 802.3u 10/100Mbps Auto-MDIX Fast Ethernet
LED	Power, Link/Act
WPS Button	Push to enable WPS
Reset Button	Reset to factory default
Privacy Button	Privacy mode on/off
Power Consumption	Max. 6.12 Watts
Power	Input: 100~240V, 50/60Hz 0.5A

	Output: 12V, 1.25A external power adapter
Dimension	112 x 110 x 130 mm (4.4 x 4.3 x 5.1 in.)
Weight	485 g (1.1 lb)
Temperature	Operating: 0°C ~ 40°C (32°F ~ 104°F)
	Storage: -25°C ~ 70°C (-13°F ~ 158°F)
Humidity	Max. 90% (non-condensing)
Certifications	CE, FCC
Requirement	
Management Interface	Internet Explorer 7.0 or higher
	Firefox 3.5 or higher
	Safari 4.0 or higher
To Run software	Windows 7 (32/64-bit), Vista (32/64-bit), XP (32/64-bit)
	Windows Server 2000, 2008
SecurView Software	Channel: supports up to 32 cameras
	Record/Playback/Motion Detection/Audio
Network Protocols	IPv4, ARP, TCP, UDP, ICMP
	DHCP Client, NTP Client, DNS Client, DDNS Client, SMTP Client, FTP Client
	HTTP
	PPPoE
	UPnP
Wireless	
Standard	IEEE 802.11b, IEEE 802.11g, and IEEE 802.11n
Frequency	2.4 ~ 2.497 GHz ISM band
Antenna	1 x detachable 2dBi dipole antennas (Reverse-SMA connector)
Date Rate	802.11b: up to 11Mbps
	802.11g: up to 54Mbps
	802.11n: up to 150Mbps
Security	64/128-bit WEP, WPA/WPA2-PSK
Output Power	802.11b: 18dBm (typical)

	802.11g: 15dBm (typical)
	802.11n: 15dBm (typical)
Receiving Sensitivity	802.11b: -85dBm at 11Mbps 802.11g: -76dBm at 54Mbps 802.11n: -65dBm at 150Mbps
Channels	1~11 (FCC), 1~13(ETSI)
Management	
Accounts	Up to 64 user accounts
Remote Login	Remote management supported
Backup / Restore	Save/retrieve configuration files
Settings	
Image	Brightness, contrast, saturation, , flip, mirror (horizontal/vertical)
Video Setting	Encoding: MJPEG - Resolution: 640 x 480 (20 fps), 320 x 240 (30 fps), 160 x 120 - Max frame rate: VGA@20fps, QVGA@30fps, QQVGA@30fps - JPEG quality: Very Low, Low, Medium, High, Very High
Recording	event based (motion detection) and scheduled
Snapshot	Trigger event: motion detection or digital input signal Action: send alert email and/or upload to FTP Real time snapshot
Port Settings	HTTP port: 80 (default)
Time	Synchronize with NTP server or set time / date manually

TV-IP851WIC

Camera	
General	Sensor: 1/5" CMOS Sensor Board Lens Focal Length: 4mm F/No: 1.5 Minimum illumination: 0 lux (IR on)

	Focus Depth: 20 cm ~ infinity

	View:
	      Horizontal: 38.0 degrees
	      Vertical: 28.7 degrees
	      Diagonal: 46.5 degrees

	Digital Zoom: 4x
Audio	Built-in omni-directional microphone Sensitivity: -38dB +/- 3dB (5 meters max.) Frequency: 100~20000Hz S/N: >60dB Format: PCM
Pan & Tilt	Pan: -170° ~ +170° Tilt: up 90°and down 25° Auto-Patrol preset positions: 24
Day/Night	Built-in ICR Night vision (IR) supports up to 7.5 meters
Hardware	
Network	IEEE 802.3u 10/100Mbps Auto-MDIX Fast Ethernet
LED	Power, Link/Act
WPS Button	Push to enable WPS
Reset Button	Reset to factory default
Privacy Button	Privacy mode on/off
Power Consumption	Max. 7.2 Watts
Power	Input: 100~240V, 50/60Hz 0.5A Output: 12V, 1.25A external power adapter
Dimension	112 x 110 x 130 mm (4.4 x 4.3 x 5.1 in.)
Weight	485 g (1.1 lbs.)
Temperature	Operating: 0°C ~ 40°C (32°F ~ 104°F) Storage: -25°C ~ 70°C (-13°F ~ 158°F)
Humidity	Max. 90% (non-condensing)

Certifications	CE, FCC
Requirement	
Management Interface	Internet Explorer 7.0 or higher
	Firefox 3.5 or higher
	Safari 4.0 or higher
To Run software	Windows 7 (32/64-bit), Vista (32/64-bit), XP (32/64-bit)
	Windows Server 2000, 2008
SecurView Software	Channel: supports up to 32 cameras
	Record/Playback/Motion Detection/Audio
Network Protocols	IPv4, ARP, TCP, UDP, ICMP
	DHCP Client, NTP Client, DNS Client, DDNS Client, SMTP Client, FTP Client
	HTTP
	PPPoE
	UPnP
Wireless	
Standard	IEEE 802.11b, IEEE 802.11g, and IEEE 802.11n
Frequency	2.4 ~ 2.497 GHz ISM band
Antenna	1 x detachable 2dBi dipole antenna (Reverse-SMA connector)
Date Rate	802.11b: up to 11Mbps
	802.11g: up to 54Mbps
	802.11n: up to 150Mbps
Security	64/128-bit WEP, WPA/WPA2-PSK
Output Power	802.11b: 18dBm (typical)
	802.11g: 15dBm (typical)
	802.11n: 15dBm (typical)
Receiving Sensitivity	802.11b: -85dBm at 11Mbps
	802.11g: -76dBm at 54Mbps
	802.11n: -65dBm at 150Mbps
Channels	1~11 (FCC), 1~13(ETSI)
Management	

Accounts	Up to 64 user accounts
Remote Login	Remote management supported
Backup / Restore	Save/retrieve configuration files
Settings	
Image	Brightness, contrast, saturation, , flip, mirror (horizontal/vertical)
Video Setting	Encoding: MJPEG
	- Resolution: 640 x 480 (20 fps), 320 x 240 (30 fps), 160 x 120
	- Max frame rate: VGA@20fps, QVGA@30fps, QQVGA@30fps
	- JPEG quality: Very Low, Low, Medium, High, Very High
Recording	event based (motion detection) and scheduled
Snapshot	Trigger event: motion detection
	Action: send alert email and/or upload to FTP
	Real time snapshot
Port Settings	HTTP port: 80 (default)
Time	Synchronize with NTP server or set time / date manually

Troubleshooting

1. **The Power LED and Ethernet Activity LED do not light up.**

   The power supply or camera might be faulty. Check that the connection to both the power source and the terminal on the back of the camera are secure and that you are using the provided power supply. If the camera is otherwise functioning correctly, the LEDs might have been disabled in the configuration. See the section of this guide on Configuration of System settings.

2. **The camera can't be accessed or access is slow**

   There might be a problem with the network cable. To confirm that the cables are working, ping the address of a known device on the network. If the cabling is OK and your network is reachable, you should receive a reply similar to the following (…bytes = 32 time = 2 ms).

   Another possible problem may be that the network device such as a hub or switch utilized by the Network Camera is not functioning properly. Please confirm the power for the devices are well connected and functioning properly.

3. **The camera can be accessed locally but not remotely**

   This might be caused by a firewall. Check the Internet firewall with your system administrator. The firewall may need to have some settings changed in order for the Network Camera to be accessible outside your local LAN. For more information, please refer to the section about installing your camera behind a router.

   Make sure that the Network Camera isn't conflicting with any Web server you may have running on your network.

   The default router setting might be a possible reason. Check that the configuration of the router settings allow the Network Camera to be accessed outside your local LAN.

4. **White vertical lines appear on the image from the camera**

   It could be that the CMOS sensor (a square panel situated behind the lens that measures the light signals and changes it into a digital format so your computer can present it into an image that you are familiar with) has become overloaded when it has been exposed to bright lights such as direct exposure to sunlight or halogen lights. Reposition the Network Camera into a more shaded area immediately as prolonged exposure to bright lights will damage the CMOS sensor.

5. **The camera images are 'noisy'**

   Often if the camera is in a low-light environment, the images can contain a lot of noise. Try enabling Night mode and see if that improves the image quality. Otherwise, try to use the camera in a location where there is a bit more light.

6. **The camera images are of poor quality.**

   Make sure that your computer's display properties are set to at least 16-bit color. Using 16 or 256 colors on your computer will produce dithering artifacts in the image, making the image look as if it is of poor quality.

   Try also adjusting the brightness, contrast, saturation, light frequency and anti-flicker controls on the Video Settings under the Configuration menu. You may also consider adjusting the resolution of the camera and the compression rate to improve the image.

7. **Video can't be viewed through the web browser interface.**

   ActiveX might be disabled. If you are viewing the images from Internet Explorer make sure ActiveX has been enabled in the Internet Options menu. You may also need to change the security settings on your browser to allow the ActiveX plug-in to be installed.

   If you are using Internet Explorer with a version number lower than 6, then you will need to upgrade your Web browser software in order to view the streaming video transmitted by the Network Camera. Try also viewing the video using Java. Ensure that you have the latest version of Java installed before you do. Go to www.java.com for more information.

Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

IEEE 802.11b or 802.11g operation of this product in the U.S.A. is firmware-limited to channels 1 through 11.

IMPORTANT NOTE:

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Europe – EU Declaration of Conformity

This device complies with the essential requirements of the R&TTE Directive 1999/5/EC. The following test methods have been applied in order to prove presumption of conformity with the essential requirements of the R&TTE Directive 1999/5/EC:

EN 60950-1:2006+A11:2009+A1:2010+A12:2011

Safety of Information Technology Equipment

EN 62311: 2008

Assessment of electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (0 Hz-300 GHz)

(IEC 62311:2007 (Modified))

EN 300 328 V1.7.1: (2006-10)

Electromagnetic compatibility and Radio spectrum Matters (ERM); Wideband Transmission systems; Data transmission equipment operating in the 2,4 GHz ISM band and using spread spectrum modulation techniques; Harmonized EN covering essential requirements under article 3.2 of the R&TTE Directive

EN 301 489-1 V1.9.2: 2011

Electromagnetic compatibility and Radio Spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements

EN 301 489-17 V2.1.1 (2009-05)

Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 17: Specific conditions for 2,4 GHz wideband transmission systems

This device is a 2.4 GHz wideband transmission system (transceiver), intended for use in all EU member states and EFTA countries, except in France and Italy where restrictive use applies.

In Italy the end-user should apply for a license at the national spectrum authorities in order to obtain authorization to use the device for setting up outdoor radio links and/or for supplying public access to telecommunications and/or network services.

This device may not be used for setting up outdoor radio links in France and in some areas the RF output power may be limited to 10 mW EIRP in the frequency range of 2454 – 2483.5 MHz. For detailed information the end-user should contact the national spectrum authority in France.

This device is designed to provide uninterrupted monitoring and/or recording. This device does not off power management functionality such as Off mode or Standby mode.

cs Česky [Czech]	TRENDnet tímto prohlašuje, že tento TV-IP851WC / TV-IP851WIC je ve shodě se základními požadavky a dalšími příslušnými ustanoveními směrnice 1999/5/ES.
da Dansk [Danish]	Undertegnede TRENDnet erklærer herved, at følgende udstyr TV-TV-IP851WC / TV-IP851WIC overholder de væsentlige krav og øvrige relevante krav i direktiv 1999/5/EF.
de Deutsch [German]	Hiermit erklärt TRENDnet, dass sich das Gerät TV-IP851WC / TV-IP851WIC in Übereinstimmung mit den grundlegenden Anforderungen und den übrigen einschlägigen Bestimmungen der Richtlinie 1999/5/EG befindet.
et Eesti [Estonian]	Käesolevaga kinnitab TRENDnet seadme TV-IP851WC / TV-IP851WIC vastavust direktiivi 1999/5/EÜ põhinõuetele ja nimetatud direktiivist tulenevatele teistele asjakohastele sätetele.
en English	Hereby, TRENDnet, declares that this TV-IP851WC / TV-IP851WIC is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.
es Español [Spanish]	Por medio de la presente TRENDnet declara que el TV-IP851WC / TV-IP851WIC cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la Directiva 1999/5/CE.
el Ελληνική [Greek]	ΜΕ ΤΗΝ ΠΑΡΟΥΣΑ TRENDnet ΔΗΛΩΝΕΙ ΟΤΙ TV-IP851WC / TV-IP851WIC ΣΥΜΜΟΡΦΩΝΕΤΑΙ ΠΡΟΣ ΤΙΣ ΟΥΣΙΩΔΕΙΣ ΑΠΑΙΤΗΣΕΙΣ ΚΑΙ ΤΙΣ ΛΟΙΠΕΣ ΣΧΕΤΙΚΕΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΟΔΗΓΙΑΣ 1999/5/ΕΚ.
fr Français [French]	Par la présente TRENDnet déclare que l'appareil TV-IP851WC / TV-IP851WIC est conforme aux exigences essentielles et aux autres dispositions pertinentes de la directive 1999/5/CE.
it Italiano [Italian]	Con la presente TRENDnet dichiara che questo TV-IP851WC / TV-IP851WIC è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 1999/5/CE.
Latviski [Latvian]	Ar šo TRENDnet deklarē, ka TV-IP851WC / TV-IP851WIC atbilst Direktīvas 1999/5/EK būtiskajām prasībām un citiem ar to saistītajiem noteikumiem.
Lietuvių [Lithuanian]	Šiuo TRENDnet deklaruoja, kad šis TV-IP851WC / TV-IP851WIC atitinka esminius reikalavimus ir kitas 1999/5/EB Direktyvos nuostatas.
nl Nederlands [Dutch]	Hierbij verklaart TRENDnet dat het toestel TV-IP851WC / TV-IP851WIC in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 1999/5/EG.
mt Malti [Maltese]	Hawnhekk, TRENDnet, jiddikjara li dan TV-IP851WC / TV-IP851WIC jikkonforma mal-ħtiġijiet essenzjali u ma provvedimenti oħrajn relevanti li hemm fid-Dirrettiva 1999/5/EC.
hu Magyar [Hungarian]	Alulírott, TRENDnet nyilatkozom, hogy a TV-IP851WC / TV-IP851WIC megfelel a vonatkozó alapvetõ követelményeknek és az 1999/5/EC irányelv egyéb elõírásainak.
pl Polski [Polish]	Niniejszym TRENDnet oświadcza, że TV-IP851WC / TV-IP851WIC jest zgodny z zasadniczymi wymogami oraz pozostałymi stosownymi postanowieniami Dyrektywy 1999/5/EC.
pt Português [Portuguese]	TRENDnet declara que este TV-IP851WC / TV-IP851WIC está conforme com os requisitos essenciais e outras disposições da Directiva 1999/5/CE.
sl Slovensko [Slovenian]	TRENDnet izjavlja, da je ta TV-IP851WC / TV-IP851WIC v skladu z bistvenimi zahtevami in ostalimi relevantnimi določili direktive 1999/5/ES.
Slovensky [Slovak]	TRENDnet týmto vyhlasuje, že TV-IP851WC / TV-IP851WIC spĺňa základné požiadavky a všetky príslušné ustanovenia Smernice 1999/5/ES.
fi Suomi [Finnish]	TRENDnet vakuuttaa täten että TV-IP851WC / TV-IP851WIC tyyppinen laite on direktiivin 1999/5/EY oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen mukainen.
sv Svenska [Swedish]	Härmed intygar TRENDnet att denna TV-IP851WC / TV-IP851WIC står I överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 1999/5/EG.

Limited Warranty

TRENDnet warrants its products against defects in material and workmanship, under normal use and service, for the following lengths of time from the date of purchase.

TV-IP851WC / TV-IP851WIC – 3 Years Warranty

AC/DC Power Adapter, Cooling Fan, and Power Supply carry 1 year warranty.

If a product does not operate as warranted during the applicable warranty period, TRENDnet shall reserve the right, at its expense, to repair or replace the defective product or part and deliver an equivalent product or part to the customer. The repair/replacement unit's warranty continues from the original date of purchase. All products that are replaced become the property of TRENDnet. Replacement products may be new or reconditioned. TRENDnet does not issue refunds or credit. Please contact the point-of-purchase for their return policies.

TRENDnet shall not be responsible for any software, firmware, information, or memory data of customer contained in, stored on, or integrated with any products returned to TRENDnet pursuant to any warranty.

There are no user serviceable parts inside the product. Do not remove or attempt to service the product by any unauthorized service center. This warranty is voided if (i) the product has been modified or repaired by any unauthorized service center, (ii) the product was subject to accident, abuse, or improper use (iii) the product was subject to conditions more severe than those specified in the manual.

Warranty service may be obtained by contacting TRENDnet within the applicable warranty period and providing a copy of the dated proof of the purchase. Upon proper submission of required documentation a Return Material Authorization (RMA) number will be issued. An RMA number is required in order to initiate warranty service support for all TRENDnet products. Products that are sent to TRENDnet for RMA service must have the RMA number marked on the outside of return packages and sent to TRENDnet prepaid, insured and packaged appropriately for safe shipment. Customers shipping from outside of the USA and Canada are responsible for return shipping fees. Customers shipping from outside of the USA are responsible for custom charges, including but not limited to, duty, tax, and other fees.

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Product Warranty Registration

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